WHAT IS CLAIMED IS:

1. An optical receiver, comprising:

a photodetector, adapted to receive an incoming optical signal from a fiber having a distal end with a slanted end face, wherein at least a portion of fiber cladding material on an exiting light side of the slanted end face has reduced thickness to allow said photodetector to be closely coupled to the slanted end face.

2. The optical receiver of claim 1 wherein angle of said slanted end face is in the range of about 45-55 degrees.

3. The optical receiver of claim 1 wherein the reduced thickness portion of the cladding material on exiting light side of the slanted end face is in the range of about 1-5μm and wherein said photodetector may operate at data rates up to about 40Gbps.

4. The optical receiver of claim 1 wherein said photodetector is a p-i-n photodiode.

5. The optical receiver of claim 1 further comprising a transimpedance amplifier coupled to output of said photodetector for converting photodetector output current signal to an output voltage signal.

6. The optical receiver of claim 5 wherein said photodetector and transimpedance amplifier are coupled to a circuit board having a power source microstrip and ground microstrip.

7. The optical receiver of claim 6 further comprising a capacitor coupled between the power source microstrip and the

ground microstrip.

8. The optical receiver of claim 6 wherein said printed circuit board is mounted in a housing.

9. The optical receiver of claim 8 wherein said housing comprises a hermetically sealed housing.

10. An optical receiver, comprising:

a housing adapted to receive a distal end of a fiber having a slanted end face for reflecting received light along a first optical path;

a photodetector mounted in said housing so that said reflected light beam is incident on said photodetector, said photodetector having a photodetecting portion responding to said light beam incident on said photodetector; and

wherein a fiber cladding material along said first optical path has reduced thickness to allow said photodetector to be closely coupled to the slanted end face.

11. The optical receiver of claim 10 wherein angle of said slanted end face is in the range of about 45-55 degrees.

12. The optical receiver of claim 10 wherein the reduced thickness portion of the cladding material is in the range of about 1-5μm and wherein said photodetector may operate at data rates up to about 40Gbps.

13. The optical receiver of claim 10 wherein said photodetector is a p-i-n photodiode.

14. The optical receiver of claim 10 further comprising a transimpedance amplifier coupled to output of said photodetector for converting photodetector output current signal to an output

voltage signal.

15. The optical receiver of claim 14 wherein said photodetector and transimpedance amplifier are coupled to a circuit board having a power source microstrip and ground microstrip.

16. The optical receiver of claim 15 further comprising a capacitor coupled between the power source microstrip and the ground microstrip.

17. The optical receiver of claim 10 wherein said housing comprises a hermetically sealed housing.

18. A method for receiving a high speed optical signal, comprising the steps of:

mounting a distal end of an optical fiber having an angled end face within a housing;

reflecting a received signal off said angled end face along a first optical path, wherein a fiber cladding material in said first optical path has reduced thickness

mounting a photodetector to said housing so as to receive said reflected optical signal.

19. A method of manufacturing a fiber to photodetector interface, comprising the steps of:

slanting an end face of an optical fiber to a predetermined slant angle to reflect said received optical signal along a reflected optical path;

determining diameter of active area of a photodetector for receiving an optical signal at said predetermined data rate;

determining separation distance between said slanted end face and said photodetector in accordance with said diameter active area;

removing at least a portion of fiber cladding material in reflected optical path in accordance with said separation distance; and

coupling said fiber and photodetector so that reflected signal is incident upon said photodetector.

20. The method of claim 19 further comprising the step of actively aligning said fiber and photodetector to maximize optical coupling efficiency.

21. The method of claim 19 further comprising enclosing said fiber and said photodetector in a housing.

22. The method of claim 21 further comprising the step of hermetically sealing said housing.

23. The method of claim 19 wherein the step of removing a portion of the cladding material along said reflected optical path comprises polishing said fiber along said reflected optical path to reduce thickness of cladding to a range of about 1-5μm.

24. The method of claim 23 further comprising receiving an optical signal at a data rate of about 40Gbps.

25. An optical receiver, comprising:

a housing adapted to receive a distal end of an optical fiber;

a focusing lens, optically aligned with said distal end of said optical fiber for focusing received signal into a first end of a fiber guide wherein a second end of said fiber guide comprises a slanted end face adapted to uniformly illuminate a photodetector.

26. The optical receiver of claim 25 wherein said focusing

lens comprises a ball lens.

27. The optical receiver of claim 26 wherein said ball lens is hermetically coupled to said housing.

28. The optical receiver of claim 25 wherein said housing comprises a substrate having recesses adapted to retain said fiber guide.

29. The optical receiver of claim 28 wherein said recesses comprise v-grooves.

30. The optical receiver of claim 28 wherein said photodetector is coupled to said substrate in optical alignment with the slanted end face of the fiber guide.

31. The optical receiver of claim 25 wherein said focusing lens comprises an aspherical lens.

32. The optical receiver of claim 25 wherein said fiber guide comprises a pure optical material.

33. The optical receiver of claim 25 wherein at least a portion of said fiber guide is coated with a reflective coating.